

Commodity Description	Specification
GNSS AIR-TYPE ANT/LS-125F-A	132*55.14mm/3~12V/SMA



1. Product Description

LS-125F-A is a high-precision air-type multi-band measurement antenna that supports the reception of satellite navigation signals from multiple systems such as BDS, GPS, GLONASS, and Galileo. The antenna uses air medium technology and features high gain, good circular polarization performance, high positioning accuracy, and good reception performance at low elevation angles. It can be used in areas such as driver training, unmanned driving base station reference station networking requirements, and high-precision mapping.

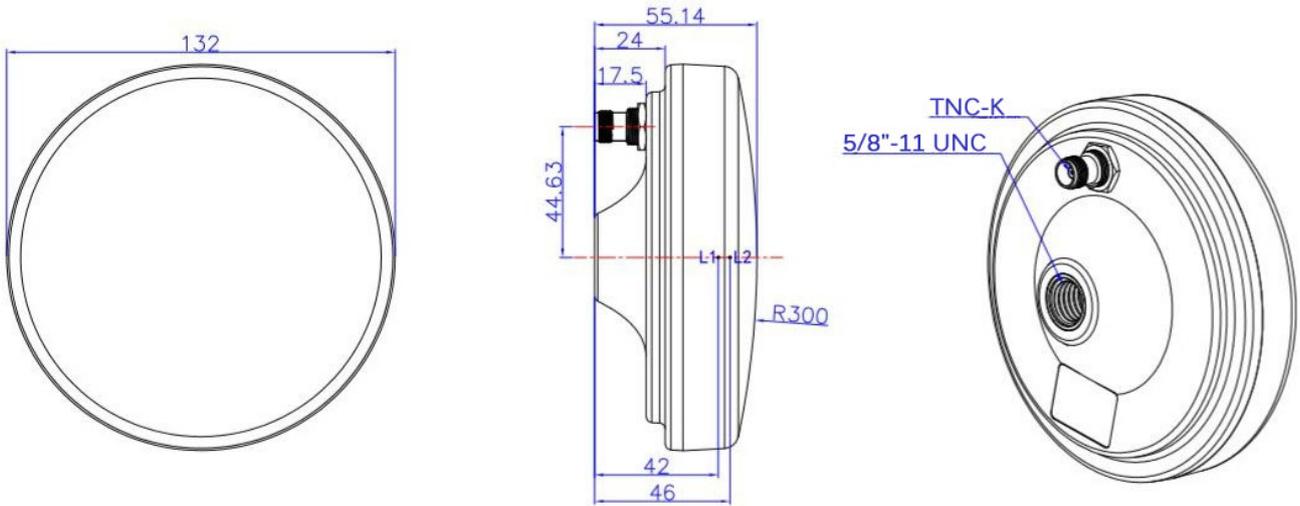
2. Technical features

- Phase center accuracy reaches millimeter level, with high phase center stability and good repeatability.
- A low elevation angle of the antenna results in high gain, providing strong tracking capability for satellites at low elevation angles, ensuring a sufficient number of usable satellites for the measurement system.
- Low noise amplifier with high gain, can support cable lengths of up to 30 meters or more.
- Unique waterproof and dustproof design ensures that the core components are completely sealed and can work normally outdoors all year round.

3. Specifications

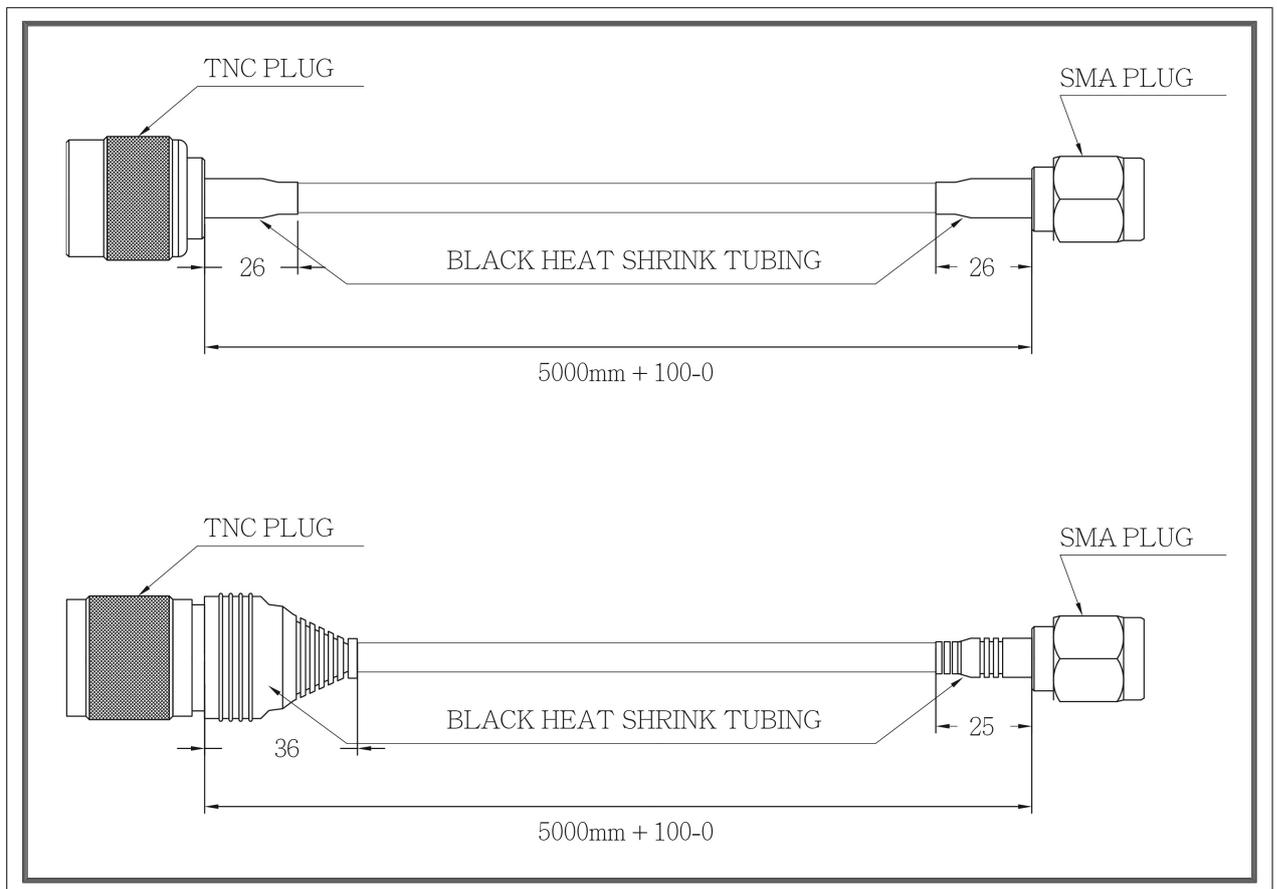
Antenna Specifications	
Frequency	GPS/QZSS: L1, L2, L5 GLONASS: G1 ,G2 GALILEO: E1, E5a, E5b BEIDOU: B1, B2,B3 IRNSS: L5 L-BAND 1170MHz~1278 ,1530HMz~1610MHz
Polarization	R.H.C.P
Gain (dBi)	≥5.5
Antenna AR (dB)	≤3
Port impedance (Ω)	50
VSWR	≤ 2
Horizontal coverage angle	360°
Phase center error (mm)	±2
Electrical Specifications	
LNA Gain (dB)	40±2 (Typ. @25°C)
Noise figure (dB)	< 2.0dB@25°C, Typ.
Operating voltage (VDC)	3 ~12V
Operating current (mA)	≤ 40mA
VSWR	≤ 1.8:1 typ. 2.0:1max
Differential propagation delay (ns)	5ns
Structural Characteristics	
Connector type	TNC-K
Protection level	IP67
Weight	≤ 250g
Environment Adaptation	
Operating temperature	-40 ~ 85 °C
Storage temperature	-45 ~ 85 °C
Relative humidit	95% couldn't condense

4. Product Dimension (unit:mm)



5. Accessory

5.1 5M Cable



<Note> Will provide one of above when customer purchased

5.2 METAL BASE MOUNTING

